# Course Syllabus COMP 455-001 and COMP 455-002 – Models of Languages and Computation Sections 001 and 002 Fall 2021

Meeting Place: Remote instruction is planned.

Meeting Time:

Section 001 11:15-12:30 Mon Wed Section 002 2:30-3:45 Mon Wed

Instructor: Prof. David Plaisted

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Office Hours: Tues 11 - 11:30 on zoom for section 1

Section 001
TA: Tao Tao
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Wednesday 2-3pm on zoom

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Section 002

TA: Siyuan Shan

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TA Office Hours: 1-2pm Friday on zoom

LA: Nikhil Vytla

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Text: Elements of the Theory of Computation, chapters 1-7, by Lewis and Papadimitriou.

Order text at https://tinyurl.com/comp-455-001-unc-w19

Prerequisites: COMP 110 or 401, and COMP 283 or MATH 381.

Grading: Homework 12% Quizzes 0%

First Midterm Exam 26% Second Midterm Exam 26% Final Exam 36%

## • Assignments and Tests

There will be two mid-semester exams, a final, and probably 9 homework assignments. Exams are given on Sakai and Gradescope, and student grades are recorded on Sakai. The mid-semester exams for both sections will be on Monday, September 27 and Wednesday, November 3. The final exam date for section 001 will be Friday, December 10 at noon. The final exam date for section 002 will be Friday, December 3 at 4:00 PM. Exams are in class and are closed book and closed notes, but if the exams are given remotely, the conditions may be different. All quizzes together count zero percent of the grade. Quizzes are also given on Sakai. Other than this, the grading algorithm will probably be 36 percent for the final exam, 26 percent for the first mid semester exam, 26 percent for the second mid semester exam, and 12 percent for homework. There may also be a few extra credit challenge problems.

#### • Homework

Homework will be submitted on Gradescope. You may work on the homework in groups of at most four persons. Please use Gradescope's group facility if you do this. Homework is important for the grade and for your understanding of the material.

## • Class participation

Class participation and behavior in class can affect your grade, if the class is not huge. Also, there are a few guidelines for behavior. If you have to leave class for a good reason, you don't need to wait until my back is turned. If you need to yawn, do it quietly. Try to enjoy class. Think of it as a course you chose, even if it is now a required course. It may help.

# • Grade distribution

In my classes most of the students typically get a C or better, but I do not grade on a curve. Typically 90-100 percent is the A range, 80-90 is B range, and so on, with a little more generosity for C and D. Plus and minus grades are near the boundaries. If there are many high grades then the cutoff between A and A- may be raised to as high as 95 percent. There are also typically extra credit problems on exams so it is possible to have well over 100 percent. This course requires some aptitude in theory. If you are weak in theory (i.e, math), do not be upset if you do not get an A or a B. In the fall of 2002 people did unusually well and there were 19 A's, 3 H's, 9 B's, and 6 C's. In the spring of 2002 there were 16 A's, 23 B's, 16 C's, and one D, not counting plusses and minuses and not counting graduate students, most of whom got H's. The 16 C's included one C-. Students who do not come to class often, tend to get lower grades unless they have exceptional ability in abstract thinking. If the exams are given remotely and are open book and open notes, there tend to be more A's.

# • Course objectives

The objectives of this course are for you to:

- Learn the factual material
- Be able to apply the algorithms and methods presented
- Gain an intuition for automata and formal languages
- Become more familiar with formal proofs

## • Web page

The COMP 455 web page is at www.cs.unc.edu/~plaisted/comp455.

This web page contains lecture notes for the course, which give the subject matter covered in the course. It also contains other material relevant for the course.

# • Piazza, Gradescope, Sakai, and Zoom

Many course announcements will be given on Piazza and students often discuss the course material there. You need to sign up for Gradescope and Piazza. If you cannot get into Sakai you need to tell us so we can enroll you there. Remote instruction will be given on zoom.

## • Honor Code

You should be aware that the honor code, which prohibits the giving or receiving of unauthorized aid on exams and homework, is in effect.

#### • Disabiliies

The University of North Carolina Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in difficulties with accessing learning opportunities.

All accommodations are coordinated through the Accessibility Resources and Service Office. In the first instance please visit their website http://accessibility.unc.edu, call 919-962-8300 or email accessibility@unc.edu.

Please contact ARS as early in the semester as possible.

#### • Discrimination

Title IX Resources Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Please contact the Director of Title IX Compliance (Adrienne Allison Adrienne.allison@unc.edu), Report and Response Coordinators in the Equal Opportunity and Compliance Office (reportandresponse@unc.edu), Counseling and Psychological Services (confidential), or the Gender Violence Services Coordinators (gvsc@unc.edu; confidential) to discuss your specific needs. Additional resources are available at safe.unc.edu.